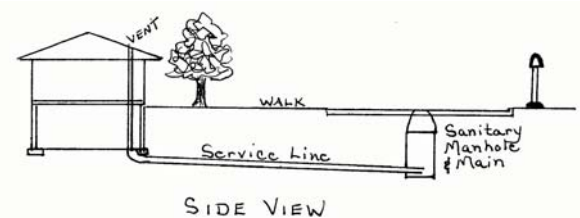


The following information is provided to assist the homeowner in understanding and maintaining their sanitary sewer service line.

## Maintenance and Care of the Sanitary Sewer Service Line

Maintenance and care of the sanitary sewer service lines from the home up to and including the connection to the City's main sewer line are the responsibility of the homeowner. Therefore, it is important for homeowners to understand the steps they can take to help prevent sewer backups, as well as what to do if a backup does occur. **The City of Arvada does not cut, clean or televise residential service lines.**

If you experience slow draining or a plugged line from your home or business, call the Wastewater Division at 720-898-7770 (after 3:30 P.M. or on weekends, call 720 898-7820) and we will check the City's main sewer line. If the problem is not in the City's main sewer line, you may need to rent a sewer service cleaning machine, or call a plumber or drain cleaner to clean your service line.



If the problem turns out to be roots, it can usually be controlled through cutting and clearing of the roots and periodic chemical application. Treat the service line with a chemical containing the active ingredient dichlobenil. This chemical does not damage trees; it only kills the roots in the line. This chemical can be purchased at most hardware stores under a different brand name. CHECK THE LABEL FOR CONTENTS. **Do not use Copper Sulfate.**

### If you choose to contract with a plumber or drain cleaning company:

- Check references and price quotes from different companies.
- Ask for information regarding the warranty period for work being performed. Get this in writing.
- Witness the work being performed.
- Should your service line need to be televised, request a copy of the video inspection for your records.
- For any recommended service line repair or replacement, seek a second opinion before signing any contracts to proceed with the work.
- You can schedule an appointment with the City of Arvada Wastewater Division to view the taped video inspection. We will provide an unbiased, second opinion concerning problems found in your service line.

In addition to roots, grease and paper products can also cause service line backups. To avoid these problems, do not dispose of grease or food waste through a garbage disposal or by pouring it down the drain. Additional items such as paper towels, hygiene products, diapers and old rags should also be placed in your trash and not in the sewer system.

### Tree Roots in Your Sanitary Sewer Service Line:

Roots from trees and large shrubs are responsible for many of the sanitary sewer service backups and damaged sewer pipes that our customers experience.

If roots become established and are growing inside your sanitary sewer pipes, it is nearly impossible to eliminate them. A routine maintenance program is needed to prevent a sudden backup problem.

### **Pipes Susceptible to Root Damage:**

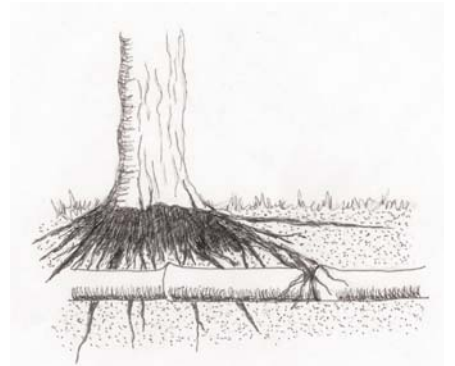
Some pipe material is more resistant to root intrusion than others. Clay tile pipe that was commonly installed until the mid-1980's can be penetrated and damaged by tree roots. PVC pipe is more resistant to root intrusion because of its better sealing joints and greater resistance to breaking.

### **How Tree Roots get into the Sanitary Sewer Service Line:**

Tree roots thrive in the warm, moist nutrient rich atmosphere inside sanitary sewers. The flow of warm water inside the sanitary sewer service pipe causes water vapor to escape to the cold soil surrounding the pipe through cracks or loose joints in the sewer pipe. Tree roots are attracted to the water vapor leaving the pipe and they follow the vapor trail to the source of the moisture.

Upon reaching the crack or pipe joint, tree roots will penetrate the opening to reach the nutrients and moisture inside the pipe. This phenomenon continues in winter even though trees appear to be dormant.

Once inside the pipe, roots will continue to grow and if not disturbed, they will completely fill the pipe with multiple hair-like root masses. The root mass inside the pipe becomes matted with grease, tissue paper, and other debris discharged from the residence or business. A complete blockage will occur if no remedial action is taken to remove the roots/blockage.



As roots continue to grow, they expand and exert considerable pressure at the crack or joint where they entered the pipe. The force exerted by the root growth is capable of breaking the pipe and may result in total collapse of the pipe. Pipes with severe root intrusion or that are structurally damaged require replacement.

The replacement cost of a sanitary sewer service line as a result of damage from tree roots may be very expensive. Homeowners should be aware of the location of their sewer service and refrain from planting certain types of trees and hedges near the sewer lines.

### **When Calling For A Plumber:**

It's a good idea to get price quotes from more than one plumber to compare rates. Keep in mind that most plumbers will charge extra for nights, weekends, and holidays. Ask the plumber if his work is guaranteed and for how long. Let the plumber know if you have any large trees over your service line and any history of sewer problems. If you have a long service line (100' or more) you need to ask the plumber if his equipment will be adequate to clean the service line, especially if tree roots are involved. The plumber should use an expanding cutting bit to scour the service line from the house all the way to the City sewer main to effectively clean the service line.